

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- At time of the Action: Claims 1-35.
- After this Response: Claims 1-15 and 18-35.

Canceled or Withdrawn claims: 16 and 17.

Amended claims: 18, 19, and 29.

New claims: none.

Claims:

1. **(ORIGINAL)** A method for accommodating a legacy application, the method comprising:

obtaining a request for a high-level credential from a legacy application;

marshalling the requested credential;

returning the marshaled credential to the application.

2. **(ORIGINAL)** A method as recited in claim 1 further comprising, after the obtaining, seeking the requested credential in a database of credentials.

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1 3. (ORIGINAL) A method as recited in claim 1, wherein a high-
2 level credential is a credential selected from a group composed of X.509
3 Certificates and bio-metrics.

4
5 4. (ORIGINAL) A method as recited in claim 1, wherein the
6 marshaled credentials appear to be a conventional username/password pair
7 to the legacy application.

8
9 5. (ORIGINAL) A method as recited in claim 1, wherein
10 marshalling comprises:

11 obtaining the requested high-level credential;
12 pickling the requested high-level credential to generate a low-level
13 credential that represents the requested high-level credential while
14 appearing to be a conventional username/password pair to the legacy
15 application.

16
17 6. (ORIGINAL) A method as recited in claim 1, wherein the
18 legacy application never has access to the high-level credential.

19
20 7. (ORIGINAL) A computer-readable medium having computer-
21 executable instructions that, when executed by a computer, perform a
22 method as recited in claim 1.

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1 8. (ORIGINAL) In a computing environment where processes
2 have a provision for low-level credentials but have no provision for high-
3 level credentials, a method for accommodating such processes comprising:
4 obtaining a request for a credential from a process, wherein the
5 requested credential is a high-level credential;
6 retrieving the requested credential from a database;
7 converting the requested high-level credential into a format
8 approximating a low-level credential and representative of the requested
9 high-level credential;
10 returning the converted credential to the process.

11
12 9. (ORIGINAL) A method as recited in claim 8, wherein a high-
13 level credential is a credential selected from a group composed of X.509
14 Certificates and bio-metrics.

15
16 10. (ORIGINAL) A method as recited in claim 8, wherein the
17 converted credentials appear to be a conventional username/password pair
18 to the process.

19
20 11. (ORIGINAL) A method as recited in claim 8, wherein the
21 process never has access to the high-level credential.

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1 12. (ORIGINAL) A computer-readable medium having computer-
2 executable instructions that, when executed by a computer, perform a
3 method as recited in claim 8.

4
5 13. (ORIGINAL) A method for authenticating a user to a
6 network, the method comprising:

7 obtaining a request for a credential to authenticate the user to access
8 a resource within the network, wherein the resource requires an appropriate
9 credential before the user may access the resource;

10 locating the appropriate credential;

11 returning the appropriate credential to the resource within the
12 network, so that the resource allows the user to access such resource;

13 wherein the obtaining, locating, and returning are performed without
14 user interaction so that the user need not be aware that such steps are being
15 performed.

16
17 14. (ORIGINAL) A method as recited in claim 13 further
18 comprising repeating the obtaining, locating, and returning for a different
19 network that is authenticated using a different credential.

20
21 15. (ORIGINAL) A computer-readable medium having computer-
22 executable instructions that, when executed by a computer, perform a
23 method as recited in claim 13.

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16. (CANCELED)

17. (CANCELED)

18. (CURRENTLY AMENDED)

A credential

management architecture, comprising:

a trusted computing base (TCB) that has full access to persisted credentials, the TCB being configured to interact with an untrusted computing layer (UTCL) that accesses the persisted credentials via the TCB;

the TCB comprises:

a credential management module configured to receive requests from the UTCL for a high-level credential for a resource, the high-level credential being associated with a user;

a credential database associated with the user, wherein credentials are persisted within the database;

the credential management module being configured to retrieve credentials from the database.

19. (CURRENTLY AMENDED) An architecture as recited

in claim 18, wherein credential management module is further configured to marshal a requested high-level credential and return the marshaled credential to the UTCL.

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1 20. **(ORIGINAL)** An architecture as recited in claim 18, wherein
2 the marshaled credentials appear to be a conventional username/password
3 pair to the UTCL.

4
5 21. **(ORIGINAL)** A computer-readable medium having computer-
6 executable instructions that, when executed by a computer, employ an
7 architecture as recited in claim 18.

8
9 22. **(ORIGINAL)** An operating system embodied on a computer-
10 readable medium having computer-executable instructions that, when
11 executed by a computer, employ an architecture as recited in claim 18.

12
13 23. **(ORIGINAL)** An apparatus comprising:

14 a processor;

15 a marshaler executable on the processor to:

16 obtain a high-level credential;

17 convert the high-level credential to generate a representation
18 of the high-level credential that is formatted as a low-level credential
19 so that it appears to be a conventional username/password pair.

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1 24. (ORIGINAL) A

low-level-credential-application

2 accommodation system comprising:

3 a request obtainer configured to obtain a request for a high-level
4 credential from a low-level-credential-application;

5 a credential retriever configured to retrieve the requested credential
6 from a database of credentials;

7 a marshaller configured to marshal the requested credential and
8 return the marshaled credential to the low-level-credential-application.

9
10 25. (ORIGINAL) A system as recited in claim 24, wherein a high-
11 level credential is a credential selected from a group composed of X.509
12 Certificates and bio-metrics.

13
14 26. (ORIGINAL) A system as recited in claim 24, wherein the
15 marshaled credentials appear to be a conventional username/password pair
16 to the legacy application.

17
18 27. (ORIGINAL) A system as recited in claim 24, wherein
19 marshaller is further configured to convert the requested high-level
20 credential to generate a low-level credential that represents the requested
21 high-level credential while appearing to be a conventional
22 username/password pair to the low-level-credential-application.

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1 **28. (ORIGINAL)** A system as recited in claim 24, wherein the
 2 legacy application never has access to the high-level credential.

3
 4 **29. (CURRENTLY AMENDED)** A system for
 5 authenticating a user to a network, the system comprising:

6 a request obtainer configured to obtain a request for a high-level
 7 credential to authenticate the user to access a resource within the network,
 8 wherein the resource requires an appropriate credential before the user may
 9 access the resource;

10 a credential retriever configured to retrieve the appropriate high-
 11 level credential from a database of credentials;

12 a credential marshaller configured to generate a representation of the
 13 high-level credential that is formatted as a low-level credential so that it
 14 appears to be a conventional username/password pair;

15 a credential returner configured to return the appropriate marshaled
 16 credential to the resource within the network, so that the resource allows
 17 the user to access such resource;

18 wherein the obtainer, retriever, marshaller, and returner are further
 19 configured to operate without user interaction.

20
 21 **30. (ORIGINAL)** An operating system comprising a system as
 22 recited in claim 29.

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1 **31. (ORIGINAL)** A network environment comprising a system as
2 recited in claim 29.

3
4 **32. (ORIGINAL)** An application programming interface (API)
5 method comprising:

6 receiving a CredUI-promptfor-credentials call having a set of
7 parameters comprising a TargetName, Context, AuthFlags, and Flags;

8 parsing the call to retrieve the parameters to determine a specified
9 resource;

10 obtaining a credential;

11 associating the credential with the specified resource;

12 persisting the credential into a database while maintaining the
13 credential's association with the specified resource.

14
15 **33. (ORIGINAL)** A method as recited in claim 32, wherein the set
16 of parameters further comprises an indicator of a data structure containing
17 customized information to display in conjunction with a user interface.

18
19 **34. (ORIGINAL)** An application programming interface (API)
20 method comprising:

21 receiving a CredUI-promptfor-credentials call having a set of
22 parameters comprising a TargetName, UserName, Password, and Flags;

23 parsing the call to retrieve the parameters to determine a requesting
24 application;

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1 obtaining a low-level credential from a user, wherein such credential
2 includes a username and a password;
3 returning the low-level credential to the requesting application.

4
5 **35. (ORIGINAL)** A method as recited in claim 34, wherein the set
6 of parameters further comprises an indicator of a data structure containing
7 customized information to display in conjunction with a user interface.

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